

<https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=173940>

Sreetheran, M. & Van Den Bosch, C. C. K. (2014). A socio-ecological exploration of fear of crime in urban green spaces: A systematic review. *Urban Forestry and Urban Greening*, 13(1), 1–18. doi: 10.1016/j.ufug.2013.11.006

## 20.11 Number of violent incidents, nuisances and crimes per 100 000 population

**Project Name:** UNaLab (Grant Agreement no. 730052)

**Author/s and affiliations:** Laura Wendling<sup>1</sup>, Ville Rinta-Hiiro<sup>1</sup>, Maria Dubovik<sup>1</sup>, Arto Laikari<sup>1</sup>, Johannes Jermakka<sup>1</sup>, Zarrin Fatima<sup>1</sup>, Malin zu-Castell Rüdenhausen<sup>1</sup>, Peter Roebeling<sup>2</sup>, Ricardo Martins<sup>2</sup>, Rita Mendonça<sup>2</sup>

<sup>1</sup> VTT Technical Research Centre Ltd, P.O. Box 1000 FI-02044 VTT, Finland

<sup>2</sup> CESAM – Department of Environment and Planning, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Safety, including indicators of crime	Social Justice and Social Cohesion
<b>Description and justification</b>	The number of violent incidents, reportable nuisances and other crimes is a primary indicator of feelings of personal safety (ISO, 2018). For simplicity, the crime rate of a given metropolitan area can be assessed before and after NBS implementation to determine the impact of NBS actions on local crime. Individual surveys are necessary to directly assess citizens' feelings of personal safety, but the crime rate can provide an easily quantifiable metric of actual crime in a given area.
<b>Definition</b>	Number of violent incidents, nuisances and crimes per 100 000 population
<b>Strengths and weaknesses</b>	+ Simple and easy to use indicator - All the crimes might not be reported
<b>Measurement procedure and tool</b>	The crime rate is defined as the number of violent incidents, annoyances and crimes per 100 000 population. It is calculated as: $\frac{\text{Total number of crimes reported}}{(\text{City's total population}/100\,000)}$

	The result is expressed as the number of crimes per 100 000 population.
<b>Scale of measurement</b>	District to metropolitan scale
<b>Data source</b>	
<b>Required data</b>	Number of crimes reported and city's population
<b>Data input type</b>	Quantitative
<b>Data collection frequency</b>	Before and after NBS implementation
<b>Level of expertise required</b>	Moderate
<b>Synergies with other indicators</b>	No synergies identified
<b>Connection with SDGs</b>	SDG 11 Sustainable cities and communities, SDG 15 Life on land, and SDG 16 Peace, justice and strong institutions
<b>Opportunities for participatory data collection</b>	No opportunities identified
<b>Additional information</b>	
<b>References</b>	<p>Bosch, P., Jongeneel, S., Rovers, V., Neumann, H.-M., Airaksinen, M., &amp; Huovila, A. (2017). CITYkeys indicators for smart city projects and smart cities. CITYkeys D1.4. Retrieved from <a href="http://nws.euocities.eu/MediaShell/media/CITYkeysD14Indicatorsforsmartcityprojectsandsmartcities.pdf">http://nws.euocities.eu/MediaShell/media/CITYkeysD14Indicatorsforsmartcityprojectsandsmartcities.pdf</a></p> <p>International Organization for Standardization (ISO). (2018). Sustainable cities and communities — Indicators for city services and quality of life (ISO 37120:2018). Retrieved from <a href="https://www.iso.org/standard/68498.html">https://www.iso.org/standard/68498.html</a></p>